

Remarks

In the office action mailed on March 15, 2004, claims 1 - 4, 6 and 9 - 14 were rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,124,044 (to Swidler) in view of U.S. Patent No. 5,736,470 (to Schneberger et al.); claim 5 was rejected under §103(a) over Swidler in view of Schneberger et al. and further in view of U.S. Patent No. 6,268,032 (to Mertens et al.); and claims 7 - 8 were rejected under §103(a) over Swidler in view of Schneberger et al. and further in view of U.S. Patent No. 4,071,391 (to Haberstroh et al.).

In accordance with various embodiments, the present invention involves applying a thin frangible protective film to a surface such as an automobile brake rotor. The protective film is designed to be applied to a receiving substrate by thin film transfer. In particular, the thin protective film is applied to the receiving substrate (e.g., via an adhesive) while being supported by a carrier, and then the carrier is removed leaving the thin protective film (and the adhesive) on the substrate. The thin protective film may be so thin that it cannot be manipulated when it is not adhered to the carrier or the receiving substrate. For example, the thin protective film may be formed as a thin coating on the carrier that is transferred from the carrier. The protective coating may be removed by cleaning or abrading the surface of the substrate that is covered by the film.

The Swidler reference discloses a peel-off coating composition that is disclosed to be applied to a surface for protecting the surface, and then peeled from the surface to remove the protective coating when no longer desired. Figure 1 of the Swidler reference shows the removal of a protective coating from a surface by mechanical

peeling. The coatings of Swidler are disclosed to be tough and relatively thick (Swidler, col.7, line 16). As stated in the office action, Swidler "fails to teach depositing a layer of corrosion inhibiting film onto a carrier film and separating the carrier film from the transferable substrate" (Office Action, page 3, lines 15 - 17).

The Schneberger et al. reference discloses a pressure sensitive adhesive article that includes a pressure sensitive adhesive layer inside of a porous layer (Schneberger et al., col.3, lines 57 - 59). The pores are designed to be large enough for the adhesive to flow through the pores when the article is applied under pressure to a surface, thereby causing the article to adhere to the surface (Schneberger et al., col.3, line 60 - col.4, line 14). The Schneberger et al. reference also discloses that in certain embodiments, a second layer 18 may comprise a removable or non-removable backing sheet or casting film (Schneberger et al., col.5, lines 34 - 36).

The Schneberger et al. reference, however, does not disclose that such a removable backing sheet or casting film may support the article for thin film transfer, and does not disclose the steps of depositing, applying and separating as claimed in the claims.

In particular, independent claim 1 is directed to a method of applying a corrosion inhibiting material to an article that includes the steps of depositing a layer of corrosion inhibiting material on a carrier film, depositing a layer of adhesive onto the layer of corrosion inhibiting material to form a transferable substrate, applying the transferable substrate to the article, and separating the carrier film from the transferable substrate. Neither the Swidler reference nor the Schneberger et al. reference discloses each of these steps, and neither of these references discloses a teaching or suggestion of

combining the references to provide a method that includes the steps of claim 1. There is no disclosure in the Schneberger et al. reference that the removable film 18 may be used as a carrier film or that the pressure sensitive adhesive article may include a corrosion inhibiting material. There is no teaching or disclosure of why one of ordinary skill in the art would have been led to combine the teachings of Swidler and Schneberger et al. to arrive at the claimed invention. There is no teaching, suggestion or inference to provide the required motivation. There mere fact that the prior art *could be* modified to achieve the claimed invention is insufficient to support a rejection under §103.

Similarly, independent claim 6 as amended is directed to a method of applying a corrosion inhibiting material to an article that includes the steps of depositing a layer of corrosion inhibiting material onto a carrier film, applying the corrosion inhibiting material to the article, and separating the carrier film from at least a portion of the corrosion inhibiting material. Again, neither the Swidler reference nor the Schneberger et al. reference discloses each of these steps, and neither of these references discloses a teaching or suggestion of combining the references to provide a method that includes the steps of claim 1. There is no disclosure in the Schneberger et al. reference that the removable film 18 may be used as a carrier film or that the pressure sensitive adhesive article may include a corrosion inhibiting material. There is no teaching or disclosure of why one of ordinary skill in the art would have been led to combine the teachings of Swidler and Schneberger et al. to arrive at the invention as claimed in claim 6.

Independent claim 11 is directed to a protective composite that includes a frangible corrosion inhibiting material that is disposed on one side of a carrier substrate such that the frangible corrosion inhibiting material is transferable from the carrier

substrate by application of the protective composite to a receiving surface and subsequent separation of the carrier substrate from the corrosion inhibiting material. Neither the Swidler nor the Schneberger et al. reference discloses a frangible corrosion inhibiting material that is disposed on one side of a carrier substrate, and neither discloses that a frangible corrosion inhibiting material is transferable from the carrier substrate by application to the receiving surface followed by subsequent separation of the carrier substrate from the corrosion inhibiting material. There is no teaching or disclosure of why one of ordinary skill in the art would have been led to combine the teachings of Swidler and Schneberger et al. to arrive at the invention as claimed in claim 11.

Independent claim 14 is directed to a system for inhibiting corrosion on brake rotors of automobile vehicles in which the system includes a protective composite that is adapted to be applied to a receiving surface. The protective composite includes a frangible corrosion inhibiting material that is disposed on one side of a carrier substrate, and the frangible corrosion inhibiting material is transferable from the carrier substrate by application of the protective composite to brake rotors and subsequent separation of the carrier substrate from the corrosion inhibiting material. Again, neither the Swidler nor the Schneberger et al. reference discloses a frangible corrosion inhibiting material that is disposed on one side of a carrier substrate, and neither discloses that a frangible corrosion inhibiting material is transferable from the carrier substrate by application to brake rotors followed by subsequent separation of the carrier substrate from the corrosion inhibiting material. There is no teaching or disclosure of why one of ordinary skill in the art would have been led to combine the teachings of

Swidler and Schneberger et al. to arrive at the invention as claimed in claim 14.

The Mertens et al. reference discloses a repositionable note sheet that is formed from a web of sheet material that includes a plurality of longitudinal rows of indicia on a front face, and a plurality of longitudinally disposed patterns of repositionable pressure sensitive adhesive on a back face.

The Haberstroh et al. reference discloses a method of manufacturing laminated panels or foils of lead and plastics. The method involves the use of a lead sheet and a synthetic sheet that employs a lead alloyed with antimony and/or coating the lead with an alloy of lead.

Each of claims 2 - 5 depends directly from claim 1, each of claims 7 - 10 depends directly or indirectly from claim 6, and each of claims 12 and 13 depends directly from claim 11. Each of claims 1 - 14, therefore, is considered to be in condition for allowance. Favorable action consistent with the above is respectfully requested.

Respectfully submitted,



William E. Hilton
Registration No. 35,192
Gauthier & Connors, LLP
225 Franklin Street, Suite 3300
Boston, Massachusetts 02110
Telephone: (617) 426-9180
Extension 111